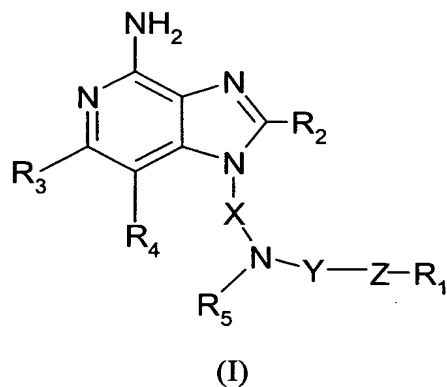


WHAT IS CLAIMED IS:

1. A compound of the formula (I):



wherein

X is alkylene or alkenylene;

Y is $-\text{CO}-$ or $-\text{CS}-$;

Z is $-\text{NR}_6-$; $-\text{NR}_6-\text{CO}-$; $-\text{NR}_6-\text{SO}_2-$; or $-\text{NR}_7-$;

R_1 is aryl, heteroaryl, heterocyclyl, alkyl or alkenyl, each of which may be unsubstituted or substituted by one or more substituents independently selected from the group consisting of:

-alkyl;

-alkenyl;

-aryl;

-heteroaryl;

-heterocyclyl;

-substituted cycloalkyl;

-substituted aryl;

-substituted heteroaryl;

substituted heterocyclyl;

-O-alkyl;

-O-(alkyl)₀₋₁-aryl;

-O-(alkyl)₀₋₁-substituted aryl;

-O-(alkyl)₀₋₁-heteroaryl;

-O-(alkyl)₀₋₁-substituted heteroaryl;

	-O-(alkyl) ₀₋₁ -heterocyclyl;
	-O-(alkyl) ₀₋₁ -substituted heterocyclyl;
	-COOH;
	-CO-O-alkyl;
5	-CO-alkyl;
	-S(O) ₀₋₂ -alkyl;
	-S(O) ₀₋₂ -(alkyl) ₀₋₁ -aryl;
	-S(O) ₀₋₂ -(alkyl) ₀₋₁ -substituted aryl;
	-S(O) ₀₋₂ -(alkyl) ₀₋₁ -heteroaryl;
10	-S(O) ₀₋₂ -(alkyl) ₀₋₁ -substituted heteroaryl;
	-S(O) ₀₋₂ -(alkyl) ₀₋₁ -heterocyclyl;
	-S(O) ₀₋₂ -(alkyl) ₀₋₁ -substituted heterocyclyl;
	-(alkyl) ₀₋₁ - N(R ₆) ₂ ;
	-(alkyl) ₀₋₁ -NR ₆ -CO-O-alkyl;
15	-(alkyl) ₀₋₁ -NR ₆ -CO-alkyl;
	-(alkyl) ₀₋₁ -NR ₆ -CO-aryl;
	-(alkyl) ₀₋₁ -NR ₆ -CO-substituted aryl;
	-(alkyl) ₀₋₁ -NR ₆ -CO-heteroaryl;
	-(alkyl) ₀₋₁ -NR ₆ -CO-substituted heteroaryl;
20	-P(O)(Oalkyl) ₂ ;
	-N ₃ ;
	-halogen;
	-haloalkyl;
	-haloalkoxy;
25	-CO-haloalkyl;
	-CO-haloalkoxy;
	-NO ₂ ;
	-CN;
	-OH;
30	-SH; and in the case of alkyl, alkenyl, and heterocyclyl, oxo;

R₂ is selected from the group consisting of:

-hydrogen;
 -alkyl;
 -alkenyl;
 -aryl;
 5 -substituted aryl;
 -heteroaryl;
 -substituted heteroaryl;
 -alkyl-O-alkyl;
 -alkyl-S-alkyl;
 10 -alkyl-O-aryl;
 -alkyl-S-aryl;
 -alkyl-O- alkenyl;
 -alkyl-S- alkenyl; and
 -alkyl or alkenyl substituted by one or more substituents selected
 15 from the group consisting of:
 -OH;
 -halogen;
 -N(R₆)₂;
 -CO-N(R₆)₂;
 20 -CS-N(R₆)₂;
 -SO₂-N(R₆)₂;
 -NR₆-CO-C₁₋₁₀ alkyl;
 -NR₆-CS-C₁₋₁₀ alkyl;
 -NR₆- SO₂-C₁₋₁₀ alkyl;
 25 -CO-C₁₋₁₀ alkyl;
 -CO-O-C₁₋₁₀ alkyl;
 -N₃;
 -aryl;
 -substituted aryl;
 30 -heteroaryl;
 -substituted heteroaryl;
 -heterocyclyl;

-substituted heterocyclyl;
-CO-aryl;
-CO-(substituted aryl);
-CO-heteroaryl; and
-CO-(substituted heteroaryl);

R₃ and **R₄** are independently selected from the group consisting of hydrogen, alkyl, alkenyl, halogen, alkoxy, amino, alkylamino, dialkylamino and alkylthio;

R₅ is H or C₁₋₁₀ alkyl, or **R₅** can join with X to form a ring that contains one or two hetero atoms;

each **R₆** is independently H or C₁₋₁₀ alkyl;

R₇ is H or C₁₋₁₀ alkyl which may be interrupted by a heteroatom or when **R₁** is alkyl, **R₇** and **R₁** can join to form a ring;

or a pharmaceutically acceptable salt thereof.

2. A compound or salt of claim 1 wherein Y is —CO—.

3. A compound or salt of claim 1 wherein Y is —CO— and **R₁** is alkyl, aryl or substituted aryl.

4. A compound or salt of claim 2 wherein **R₂** is alkyl-O-alkyl.

5. A compound or salt of claim 2 wherein **R₂** is H or alkyl.

6. A compound or salt of claim 1 wherein Y is —CS—.

7. A compound or salt of claim 6 wherein Y is —CS— and **R₁** is alkyl, aryl or substituted aryl.

8. A compound or salt of claim 6 wherein **R₂** is alkyl-O-alkyl.

9. A compound or salt of claim 6 wherein **R₂** is H or alkyl.

10. A compound or salt of claim 9 wherein R₁ is alkyl, aryl, or substituted aryl.
11. A compound or salt of claim 1 wherein X is $-(CH_2)_{2-4}-$.
12. A compound or salt of claim 1 wherein R₁ and R₇ join to form a ring.
13. A compound or salt of claim 1 wherein R₁ and R₇ join to form a morpholine ring.
14. A compound or salt of claim 1 wherein R₅ and R₆ are both hydrogen.
15. A compound or salt of claim 1 wherein R₃ and R₄ are both methyl.
16. A compound or salt of claim 1 wherein R₃ and R₄ are independently H or alkyl.
17. A compound selected from the group consisting of:
N-[4-(4-Amino-2-butyl-6,7-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)butyl]-*N'*-phenylurea;
N-[4-(4-Amino-2-butyl-6,7-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)butyl]-*N'*-phenylthiourea;
N-{4-[4-amino-2-(ethoxymethyl)-6-methyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl]butyl}morpholin-4-ylcarboxamide;
N-[4-(4-amino-6,7-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)butyl]morpholin-4-ylcarboxamide;
2-(ethoxymethyl)-6,7-dimethyl-1-{2-[1-(morpholin-4-ylcarbonyl)piperidin-4-yl]ethyl}-1*H*-imidazo[4,5-*c*]pyridin-4-amine;
N-[3-(4-amino-2,6,7-trimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)propyl]morpholin-4-ylcarboxamide;
N-{3-[4-amino-2-(ethoxymethyl)-6,7-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl]propyl}morpholin-4-ylcarboxamide;
N-{2-[4-amino-2-(ethoxymethyl)-6,7-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl]-1,1-dimethylethyl}-*N'*-phenylurea

N-{2-[4-amino-2-(ethoxymethyl)-6,7-dimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl]-1,1-dimethylethyl}morpholin-4-ylcarboxamide; and

N-[2-(4-amino-2,6,7-trimethyl-1*H*-imidazo[4,5-*c*]pyridin-1-yl)ethyl]morpholin-4-ylcarboxamide;

5 or a pharmaceutically acceptable salt thereof.

18. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 in combination with a pharmaceutically acceptable carrier.

10 19. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 2 in combination with a pharmaceutically acceptable carrier.

20. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 17 in combination with a pharmaceutically acceptable carrier.

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21. A method of inducing cytokine biosynthesis in an animal comprising administering a therapeutically effective amount of a compound of claim 1 to the animal.

20 22. A method of treating a viral disease in an animal comprising administering a therapeutically effective amount of a compound of claim 1 to the animal.

23. A method of treating a neoplastic disease in an animal comprising administering a therapeutically effective amount of a compound of claim 1 to the animal.

25 24. A method of inducing cytokine biosynthesis in an animal comprising administering a therapeutically effective amount of a compound of claim 2 to the animal.

25. A method of treating a viral disease in an animal comprising administering a therapeutically effective amount of a compound of claim 2 to the animal.

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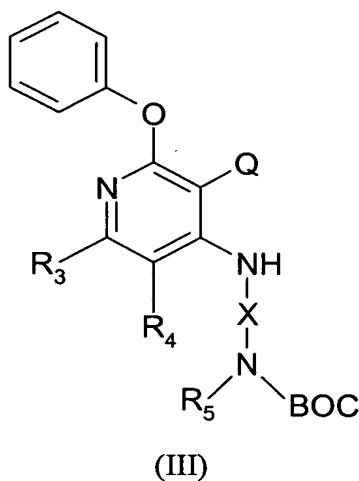
26. A method of treating a neoplastic disease in an animal comprising administering a therapeutically effective amount of a compound of claim 2 to the animal.

27. A method of inducing cytokine biosynthesis in an animal comprising administering a therapeutically effective amount of a compound of claim 17 to the animal.

28. A method of treating a viral disease in an animal comprising administering a therapeutically effective amount of a compound of claim 17 to the animal.

29. A method of treating a neoplastic disease in an animal comprising administering a therapeutically effective amount of a compound of claim 17 to the animal.

30. A compound of the formula (III):



wherein: **Q** is NO₂ or NH₂;

X is alkylene or alkenylene;

R₃ and **R₄** are independently selected from the group consisting of hydrogen, alkyl, alkenyl, halogen, alkoxy, amino, alkylamino, dialkylamino and alkylthio; and

R₅ is H or C₁₋₁₀ alkyl, or **R₅** and **X** can join to form a ring that contains one or two hetero atoms;
or a pharmaceutically acceptable salt thereof.